



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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ATLANTA, GEORGIA 30303-8960

MAY 11 2005

4APT-APB

Ronald W. Gore, Chief
Air Division
Alabama Department of
Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Dear Mr. Gore:

This correspondence is being sent to provide you with an official final copy of the Environmental Protection Agency (EPA) Region 4 report, which was completed as a result of the EPA Title V and New Source Review (NSR) program evaluation conducted on February 8th -10th, 2005 (see Enclosure). The purpose of this program review was to evaluate the status and the ability of the Alabama Department of Environmental Management (ADEM) to carry out the duties and responsibilities required to effectively run the Title V and NSR programs, as well as find out how EPA can best assist ADEM in meeting these commitments.

I would like to thank you and your staff for your cooperation throughout the evaluation. Your staff responded to the questionnaires and provided all requested material in a timely and professional manner. In addition, I commend you on the performance of both of these programs. Both programs are operating at a very high level of proficiency. These programs are important tools to implement measures protecting air quality for the citizens of Alabama. We appreciate your efforts to ensure that Alabama has effective air programs

If you or your staff have any questions regarding the report, please do not hesitate to contact Randy Terry of the EPA Region 4 staff at (404) 562-9032.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides and Toxics
Management Division

Enclosure



Alabama Department of Environmental Management Title V and New Source Review Program Review

The U.S. Environmental Protection Agency (EPA) Region 4 committed to conduct detailed title V and New Source Review (NSR) program reviews for all state and local programs that have at least ten title V major sources within their jurisdiction. These evaluations also include a review of the title V fees collected and billed annually. This commitment results from an agreement between the EPA Office of Air and Radiation and the EPA Office of Inspector General which required EPA to conduct title V program evaluations of all state and local programs. EPA Region 4 decided, in addition to title V, to use this opportunity, when applicable, to evaluate the NSR programs at each of the state and local programs. The program reviews are to be completed by the end of Fiscal Year 2006. The Alabama Department of Environmental Management (ADEM) program review was conducted the dates of February 8th -10th, 2005 in Montgomery, Alabama. Prior to arrival at the Alabama state office, EPA emailed a list of 10 title V sources to ADEM that EPA planned to review as part of the overall program review. Upon EPA's arrival at ADEM, EPA spent the first portion of the day discussing the title V questionnaire with ADEM staff. The remainder of the day was allocated to reviewing the permit files. The following parties attended the initial meeting: Randy Terry (EPA Region 4), Gracy Danois (EPA Region 4), Katy Forney (EPA Region 4), Larry Brown (ADEM), and Tim Owen (ADEM).

Alabama Title V Program Review

1. Program Review

ADEM's organizational structure for air permitting resides at the central office in Montgomery. All title V permits are processed in the Montgomery office. ADEM's title V permitting jurisdiction covers all of Alabama except for Jefferson County and the City of Huntsville which have their own permitting programs.

The headings in the title V portion of this report duplicate the headings in the title V program review questionnaire administered during the visit with the exception of section I (Program Highlights).

EPA appreciated ADEM's efforts to aid the evaluation process by providing an answered copy of the program review questionnaire prior to the meeting. For many questionnaire items, the answers provided by ADEM are more detailed than indicated in the summary discussion below. The answered questionnaire from ADEM will be on file at EPA Region 4 for reference.

A. Title V Permit Preparation and Content

The ADEM has issued 100 percent (251 total) of their initial title V permits. During the early stages of permit issuance, ADEM requested all applicants to submit "skeleton" applications to serve as placeholders until ADEM was approximately six months from beginning to work on the draft permit for a particular source. At that time, ADEM would contact the source and request the complete application for a title V permit. The use of the "skeleton" applications greatly reduced the need to obtain updated information during the initial permit issuance. During the initial issuance of title V permits, ADEM presented annual title V updates to inform industry in Alabama of the title V program requirements. ADEM has noticed an improvement in the quality of the applications they receive over the years since they began implementing the annual updates.

In instances where a significant amount of time occurs between application submittal and drafting a permit, ADEM requires that the application be updated and a new compliance certification must be submitted. ADEM's permit writers also handle enforcement of the regulations for the same facility and are familiar with the compliance status of a facility before writing the permit. In cases where the facility is out of compliance, ADEM sets specific dates and milestones for returning the facility to compliance. If these dates and milestones are not included in the permits, the permits are delayed until the facility has attained compliance.

To improve permit writing and reduce processing time, title V permits of similar plants are handled by the same permit writers, thus building a greater familiarity with the necessary requirements for those type plants. In addition, ADEM routinely has their permit writers attend courses for writing permits sponsored by EPA. ADEM has also developed a process for quality assuring their permits prior to issuance. All draft permits prepared by the permit writer must pass through three tiers of internal review prior to permit issuance.

ADEM has made specific efforts to streamline their permits by incorporating test methods, and other federal requirements into the title V permit by referencing the permit number or rule. Also, ADEM streamlines multiple applicable requirements on the same emission units by grouping similar units and listing the requirements of only the most stringent applicable requirement.

ADEM prepares a statement of basis (SOB) and/or factual and legal basis for each title V permit processed. The SOB contains all the justifications for the permit conditions. In order to ensure consistency in developing the SOB, ADEM has provided training to all permits writers on the necessary content of the SOB. ADEM works to ensure that each SOB explains, at a minimum, the rationale for monitoring as well as applicability decisions and any exemptions.

In discussing the overall strengths and weakness of the format of title V permits, ADEM believes that the technical completeness, readability and enforceability are the strengths of the program. ADEM also stated that overall the permits are more logically configured than previous permits.

B. General Permits

ADEM has not issued any general permits for title V sources.

C. Monitoring

In order to ensure that its operating permits contain adequate monitoring, ADEM consistently reviews permits prepared by other states and other documents developed by EPA to determine the appropriate monitoring for a particular industry. ADEM also continually provides internal training for their permit writers on monitoring. In addition, ADEM allows its permit writers to specialize in certain industries, which, in turn, allows for the permit writers to stay abreast of the current monitoring requirements within an industry. As a practical matter, ADEM adds periodic monitoring into the title V permits for most units that are subject to a regulation that do not contain underlying monitoring requirements.

D. Public Participation and Affected State Review

ADEM's current policy is to proceed to the 30 day public notice period once the permit is in a final draft form. ADEM does not have a State publication that it uses for publishing their public notices. The public notice is generally published in the nearest newspaper to the source with a daily publication. On the occasion's, a community near the source has a weekly newspaper, ADEM usually will publish the public notice in the weekly paper as well. On several occasions, ADEM has published the public notice in the daily paper in an adjacent state (Georgia). The range of costs to publish a public notice typically falls between 50 and 300 dollars. ADEM also maintains a mailing list to notify any persons interested in title V permits. Anyone interested in being on this mailing list can submit a request, by phone, email, or mail to ADEM, to be included. There is no fee charged for inclusion. New names are listed within the week of the request. Persons on the mailing list receive a copy of the public notice. The notice, draft permit and the SOB can be downloaded from the ADEM's website, which is updated daily. ADEM's website includes information within each notice explaining where the public should go to view

the documents and how to submit comments. Additionally, ADEM has added a document to their website entitled "Public Participation in the ADEM rulemaking and Permitting Process" to assist the public, and ADEM's Office of Communication, Planning and Outreach acts as a liaison to the public. In order to help the public find out when the 60 day citizen petition clock begins, ADEM has agreed to include language within all title V public notices referring the public to EPA Region 4's website. By the time this report was drafted, ADEM had, in fact, already revised their public notices to include this information.

Upon request, copies of any requested additional information relative to the permit action is sent at no charge, as long as the additional information requested is less than 33 pages. However, if the information requested results in more than 33 pages, then the person is charged 30 cents a sheet for the entirety of the additional information. ADEM believes that the most effective avenue for public notice has been to submit the information to the groups on their mailing list. In addition, ADEM provides a copy of the public notice, SOB, and the draft permit on their website, as an official method of notifying the public. ADEM does not provide notices in any language other than English. ADEM maintains copies of the draft permit, the permit application and the SOB at the local office for sources located in Mobile County.

ADEM has not received many public comments relative to title V permit actions, and has noticed that most comments they receive on title V are not, in their opinion, relevant to the issuance of that particular title V permit. Additionally, ADEM has noticed that sources in the Mobile area tend to generate the most comments. In the event that a permit receives comments that result in a relaxation to the draft permit, or if a significant change were made (e.g, from compliance to non-compliance), ADEM would then re-propose the permit. ADEM has a procedure in place to hold a public hearing, in the event that they receive a significant number of relevant comments.

In order to ensure quality permits, ADEM works with the permittees prior to public noticing the permit. ADEM does not proceed to public notice until the permittee and ADEM have reached an agreement on the draft permit. The bulk of the comments received from the sources during their internal negotiations concern a difference of opinion between ADEM and the source on the applicability or monitoring requirements.

ADEM notifies all adjacent states of every public notice by including them on their mailing list. ADEM notifies tribes by letter, enclosing a copy of the public notice, when a permitting action is within 50 miles of tribal land. To date, the ADEM has not received comments from any affected states or Tribes nor have they provided any comments to another state as an affected state.

E. Permit Issuance/ Revision/ Renewal

ADEM has issued 100 percent completion of their initial title V permits. ADEM has been able to process title V revisions within the time frames allotted by Part 70. In order to further streamline the issuance of revisions, on minor modifications ADEM has requested the EPA notify them as soon as they have finished their review. This allows ADEM to issue the permit prior to the end of the 45 day review process. For significant modifications, ADEM has requested that the public comment and the EPA review be done simultaneously, so that the final

permit can be issued in 45 days, if no comments are received during the public comment period. Issuance of this permit does not preclude the public from having 105 days to file a petition.

ADEM is currently in the process of issuing title V permit renewals. ADEM has created a database that gives notice to the permit writer, when a permit is due for expiration. Overall, ADEM has found the renewal process to be easier than the issuance of initial title V permits, primarily due to an increase in staff experience. ADEM is requiring the source to submit a full application and address Compliance Assurance Monitoring (CAM), if applicable. The majority of the renewal applications submitted have been timely and complete. At the time of the program review, ADEM had received a total of 73 renewal applications and had issued 27 permit renewals.

F. Compliance

Alabama requires all deviations from title V permit requirements to be reported prior to the semi-annual monitoring report unless specifically exempted in the permit. ADEM title V permits do not require all reports to be certified by a responsible official. They allow routine deviation reports with no certification as long as the deviations are included in periodic reports that are certified. Each deviation report must contain the probable cause of the deviation, corrective actions taken, and the magnitude and duration of the deviation. ADEM reviews 100 percent of all deviation reports, semi-annual monitoring reports, and annual compliance certifications.

ADEM has developed a separate compliance certification form. Although they don't require the sources to use the form, approximately 90 percent of them do use the form.

G. Resources and Internal Management Support

ADEM's title V staff has to balance their title V workload with competing work duties such as other permitting activities, enforcement and compliance activities. ADEM currently has 35 title V permit writers on staff and estimate their time allocation to be 30 percent writing permits, 60 percent enforcement of those permits, and 10 percent other activities. ADEM's permit writers generally have a workload of 10 permits per permit writer. Management is kept abreast of permit issuance by checking the ADEM permitting database.

ADEM has experienced a staff turnover rate of approximately 25 percent a year. Thus far ADEM has been able to continue to work effectively despite the turnover due to the retention of their more experienced employees. ADEM has developed a career ladder for permit writers. Promotions are available for career advancement but only into entry-level management. While it has been discussed, ADEM has not established a "technical expert" career ladder. ADEM is also limited in its hiring practices by not being able to offer salaries competitive with many other agencies and an inability to hire experienced staff due to an inability to offer them salaries commensurate with their work experience levels. Once hired, all employees are expected to complete a list of EPA APTI courses over their first two years of employment and are mentored by veteran employees. Existing employees continue their permit training by attending EPA intermediate permit writing courses and by attending seminars presented by AWMA and other

organizations. ADEM's employees must also take training on how to develop periodic and/or sufficiency monitoring in permits, how to ensure that permit conditions are enforceable as a practical matter and how to write a SOB. ADEM has noticed that the largest internal roadblock to permit issuance from the perspective of resources and internal management support has been the competing priorities of NSR, enforcement and non-title V sources.

ADEM assess title V fees for each title V major source based on actual emissions for the previous calendar year and are due annually in October. The current title V fee for Alabama is \$19.50 dollars per ton, based upon actual emissions. Sources send in their title V payment into a separate account established by ADEM's Fiscal Division to track title V revenue. ADEM's Fiscal Division also utilizes a separate accounting system to track title V expenses.

Although ADEM does not have an Environmental Justice (EJ) policy, they do employ an in-house coordinator charged with oversight of EJ related activities. Additionally, ADEM has provided training for all of their supervisors on EJ issues and will initiate training for their staff at some point in the future. Currently the permit writers do have access to the demographic information necessary for EJ assessments, but have not utilized them.

H. Title V Benefits

ADEM believes that they have gained benefits as a result of the title V program and have taken aspects of the title V program and extended them to other program areas. Because of the successful implementation of the title V program, ADEM created the Synthetic Minor Operating Permit Program, which requires much of the same monitoring and reporting as the title V program. Another benefit noted due to the title V program is a much better emission inventory. Other benefits of the title V program brought about from the title V fee money include better training, better funding for travel to sources and a stable funding source despite fluctuations in other state programs.

I. Program Highlights

Some of the highlights observed during the evaluation were the 100 percent issuance rate of the initial title V permits, and that the title V permits were well written and easily understood. Another area of excellence noted is ADEM's employee training program, spending significant resources to provide training for their employees. This commitment to ensuring that the ADEM staff is sufficiently trained is visible in the quality of the permits that are issued by ADEM. Another example of ADEM's commitment to maintain a well-trained staff is the requirement for ADEM staff to complete certain mandatory training courses.

2. Permit Reviews

EPA conducted an administrative review of the files for 10 ADEM title V permits. The actual permits were not reviewed for content. The permit files selected included a cross section of permits across several industry sectors. Overall, ADEM's permit files contained all of the

necessary components; however, due to the individualized method of filing by permit writers, they were difficult to review and required staff to take multiple trips to retrieve requested information. The files did not consistently contain the background documentation on some of the decisions (e.g., applicability, monitoring) that were made during the permitting process. Although we understand that part of the decisions will rely on the personal experience and knowledge of the permit writers, they should still be documented. This will not only help bring transparency of the process to the public and EPA, but will also assist permit writers which may take over the facilities in the future. Therefore, EPA suggests that ADEM develop a format to consistently organize the permit files and improve documentation of decision-making, even when it relies on personal knowledge and experience.

- Since the program evaluation, ADEM has committed to improving its documentation of decision making, but does not agree to make any changes to their filing system. ADEM believes that their current system is the most efficient for the permit writer.

Alabama New Source Review (NSR) Program Review

On February 9, 2005, the Region 4 office of the U.S. Environmental Protection Agency (EPA) conducted a review of the Alabama Department of Environmental Management (ADEM) new source review (NSR) permit program. The NSR program review consisted of administering a questionnaire developed for EPA's national NSR program review project. Region 4 has reviewed virtually all of ADEM's major NSR permits in recent years; no major NSR permits were evaluated as part of the on-site review.

The primary EPA staff person conducting the review was Jim Little from Region 4's Air Permits Section. Other EPA representatives present during the review were Randy Terry, Katy Forney, and Gracy Danois. ADEM's primary participants were from ADEM's Air Division and consisted of Tim Owen and Larry Brown. Ron Gore, Chief of the Air Division, was present during part of the main review.

ADEM has a SIP-approved NSR program with its own NSR rules. ADEM therefore has authority to issue both major and minor NSR permits. Because there has been an ozone nonattainment area in Alabama in recent years, the applicable major NSR permitting regulations are the regulations for prevention of significant deterioration (PSD) and the regulations for nonattainment areas. However, as stated again below, ADEM has not had to process any major nonattainment NSR permits in the ozone nonattainment area.

ADEM's organizational structure for air permitting resides in the central office in Montgomery with all major and minor NSR permits processed in the Montgomery office. ADEM's NSR permitting jurisdiction covers all of Alabama except for Jefferson County and the City of Huntsville which have their own SIP-approved permitting programs.

The headings in the following report duplicate the headings in the NSR program review questionnaire administered during the visit.

As an appreciated aid to EPA, ADEM provided a copy of the program review questionnaire annotated with ADEM's answers. For many questionnaire items, the answers provided by ADEM are more detailed than indicated in the summary discussion below. The answered questionnaire from ADEM will be on file at EPA Region 4 for reference if needed.

Several items in the questionnaire involve the method by which a reviewing authority such as ADEM provides outreach information to the regulated community and other public interests. As one method of outreach, ADEM holds a periodic regulatory update conference for anyone to attend. These conferences are well attended and provide an excellent means of disseminating information on numerous topics. EPA commends ADEM for this form of public outreach.

Common Program Requirements (PSD and Nonattainment NSR)

A. Netting

ADEM follows netting procedures that are generally consistent with EPA policy and guidance. When an application for a modification of an existing major source is received, ADEM reviews previous permits to assess, for example, which past emissions reductions have already been relied on for netting purposes. The definition of "actual emissions" in ADEM's PSD regulations provides for using "source-specific allowable" emissions as equivalent to actual emissions. ADEM and EPA discussed the circumstances under which ADEM would allow use of source-specific allowables. ADEM indicated that such use would only occur for units that have gone through a PSD best available control technology (BACT) evaluation or have BACT-like controls. ADEM intends to include an explanation in future PSD preliminary determinations when source-specific allowables have been deemed equivalent to actual emissions. EPA encourages this practice in keeping with the importance of having an adequate public record to support NSR permitting decisions.

B. Routine Maintenance, Repair and Replacement (RMRR)

ADEM is familiar with the RMRR evaluation approach and has made several RMRR determinations in the last five years. ADEM generally follows EPA's four-factor RMRR assessment approach. Related to consideration of the "purpose" factor, for example, an increase in boiler steam generation capacity might not be an indication of a non-routine change if the boiler firing rate and emissions are not changing. Further related to RMRR, ADEM and EPA also discussed the circumstances under which title V, 502(b)(10) changes would be considered routine and not subjected to an NSR applicability assessment. ADEM would not consider replacement of an entire emissions unit as routine.

C. Synthetic Minor Limits

ADEM issues minor source permits with permit conditions appropriate to the nature of the synthetic minor limits. Facilities that report emissions close to their permit limits are tracked more closely than facilities that are well below their limits.

Modeling may be required for minor sources based on ADEM's experience with evaluation of ambient impacts. For example, sources with low stacks and relatively high emissions may be modeled. Modeling might also be required for sources located in areas where previous modeling has indicated potentially high ambient concentrations.

D. Pollution Control Projects (PCP) Exclusion

ADEM's PSD rules do not incorporate the PCP exclusion in federal rules for electric utility steam generating units (EUSGUs). Instead ADEM rules provide for an "environmentally beneficial" project exclusion available to all source categories on a case-by-case basis. ADEM has a narrow view of the types of projects that would qualify as environmentally beneficial. For

example, pollution control projects that result in an increased risk from the release of hazardous air pollutants are excluded from being considered an environmentally beneficial project. In addition, ADEM is considering retention of the primary purpose test when revising its rules to comply with EPA's December 2002 NSR rule revisions. (EPA's rule revisions deleted the primary purpose test.) Most of the PCP exclusions that have been requested in Alabama have been for paper mills and EUSGUs.

E. Fugitive Emissions

ADEM's definition corresponds to the federal rule definition of fugitive emissions. Fugitive emissions are considered in NSR applicability assessments for both new sources and modifications of existing sources, but only if the source is in one of the listed source categories. ADEM would allow reductions in fugitive emissions to be creditable in a netting analysis only if the fugitive emissions are quantifiable. For example, a chemical plant with extensive piping might be able to use standard pipe leak fugitive emission factors to take credit for reductions achieved by installation of a leak detection and repair program.

F. Modeling

ADEM follows the modeling procedures in 40 CFR Part 51, Appendix W. The need for modeling of minor sources is determined on a case-by-case basis. For example, modeling might be required for minor sources in heavily industrialized areas.

ADEM requests applicants to submit a modeling protocol for PSD permit applications but protocols are not required by rule. ADEM has indicated that protocols may be required when AIRMOD becomes the standard dispersion model. Meteorological data required for modeling are specified by ADEM. Emission source inventories for modeling are provided by ADEM to permit applicants. EPA has previously expressed concern that documentation for each project is not readily available for evaluation by outside reviewers concerning the specific sources considered and the specific sources eliminated when ADEM prepares an inventory for modeling purposes. EPA continues to have this concern.

- In response to EPA's concern, ADEM submitted a detailed write-up to EPA reiterating their position and that they believe EPA's concern is unfounded. The detailed explanation is contained in the complete file at the EPA office. EPA commits to continue discussions with ADEM on this issue.

Modeling input files provided in permit applications are thoroughly reviewed by ADEM, and ADEM re-runs modeling evaluations if considered necessary.

If modeling demonstrates a violation of a national ambient air quality standard or a PSD increment but the applicant's units are not a significant contributor to the violation, ADEM would grant a permit for the applicant's project. ADEM would then contact owners of sources having a significant contribution to seek resolution of the modeled violation. If modeling shows the applicant is a significant contributor to a PSD Class II violation, the permit can be issued and

ADEM is responsible for resolving the problem before operation of the source begins. (This policy is in keeping with a 1988 EPA memo.) If the applicant is a significant contributor to a violation of a national ambient air quality standard, a permit is not issued until the violation is resolved.

Assessment of toxic air pollutants not regulated by NSR rules is conducted based on ADEM policy for such modeling.

G. Stationary Source Determinations

One of the criteria for deeming two or more facilities to be part of the same stationary source is that the facilities must be contiguous or adjacent. By virtue of a state commission ruling and a state court ruling, ADEM must view this criterion as meaning physically touching (or separated by no more than something like a roadway or rail line.) In accordance with these rulings, facilities that are physically separated can not be considered part of the same source. EPA requested copies of these rulings. ADEM commented that this narrow definition of contiguous or adjacent has the advantage of preventing separated facilities from being able to use inter-facility netting.

H. Debottlenecking and Increased Utilization

For NSR applicability purposes, ADEM uses a differential emissions increase approach for both debottlenecked and increased utilization emissions units. This means that the emissions increase from a debottlenecked or increased utilization unit for a proposed project is equal to the maximum potential emissions resulting from that portion of the unit's operation needed to support the proposed project. Furthermore, ADEM does not deem an emissions unit to be a debottlenecked or increased utilization unit if it has previously undergone PSD permitting for its maximum capacity.

- The treatment of debottlenecked units using the differential emissions increase approach is a departure from current federal policy which is to use the difference between past actual and total allowable emissions. Future discussion on this point may be necessary. EPA is considering a federal rule to clarify this topic. Until this occurs, ADEM position will remain a departure from the federal policy.

I. Relaxation of Limits Taken to Avoid Major NSR

Changes in synthetic minor source limits are potentially subject to relaxation requirements. Companies have to obtain a permit revision for a relaxation before making a change. Failure to do so has been a common type of violation detected by ADEM. ADEM allows a minor source to have an increase in emissions equal to the major source threshold (100 or 250 tons per year) only if the increase is for a new process operation.

J. Circumvention/Aggregation Issues

Factors that ADEM uses to check for possible circumvention include the following: closeness of sequential projects in time; functional dependence of separate projects; and budgetary allotment, meaning whether documentation exists to show that budgeting was approved for more than one project phase. In addition, if an applicant were to apply for a new component while another component was still in the permitting process, ADEM would view the two components as one project. As an example of advice provided to source owners on this subject, ADEM cited advice given to a paper mill owner that was considering staged projects. ADEM advised the owner to calculate emissions for the total staging and seek a permit for the total.

Prevention of Significant Deterioration (PSD)

A. Program Benefits Quantification

ADEM believes that the PSD program is an incentive for sources to reduce emissions below the major source levels. ADEM also believes that PSD permits have been used as the authority to implement other priorities and improve monitoring and reporting, however, they have not noticed communities utilizing the PSD program as a mechanism to improving air quality. Overall, ADEM believes that the PSD has contributed to sustaining good air quality.

B. Best Available Control Technology (BACT)

ADEM does not mandate use of the top-down BACT evaluation procedure and would not reject an application with a BACT evaluation not based on the top-down approach. ADEM believes that the vast majority of the PSD projects they review result in BACT determinations equivalent to the result that would be obtained from the top-down procedure.

ADEM views permit applications as part of the public record for major NSR permits. If ADEM concurs with evaluations in a permit application (for example the BACT evaluation), ADEM believes referring to this concurrence is sufficient documentation on ADEM's part without re-stating application information in the preliminary determination.

If an emissions limit (for example, a new source performance standard) applies to an emissions unit undergoing a BACT evaluation, ADEM's position is that this limit sets the baseline for BACT cost evaluation calculations. Further related to cost calculations, ADEM places primary reliance on incremental cost effectiveness in a BACT cost evaluation rather than total (also referred to as average) cost effectiveness. In response to the questionnaire item concerning comparative costs for BACT determinations, ADEM replied that comparative technologies are of more interest than comparative costs.

For projects involving multiple units emitting a pollutant subject to PSD review, ADEM would not require "truly small" units to undergo BACT review.

Exceptions from emissions limits for startup and shutdown periods can only be invoked if the exceptions are specifically stated as a permit proviso.

- As has been discussed with ADEM in the past, not requiring the top-down BACT evaluation procedure and relying more on incremental cost effectiveness than total cost effectiveness are both departures from EPA policy.

C. Class I Area Protection for PSD Sources

ADEM requires all PSD permit applicants to conduct an analysis of Class I impacts if projects are within 100 km of a Class I area. ADEM provides a copy of applications for such projects to the federal land manager (FLM) of the affected area. For projects located more than 100 km from a Class I area, it is the applicant's choice to perform an analysis, not perform an analysis, or consult with the Class I area FLM for guidance.

ADEM does not require applicant's to obtain prior approval of planned Class I area impact assessment procedures, but the majority of applicants do submit a protocol. If a predicted Class I area increment violation were predicted (which seldom occurs), ADEM would conduct a case-by-case analysis to correct the problem.

D. Additional Impacts - Soils, Vegetation, Visibility, Growth

ADEM generally assumes that compliance with the primary and secondary national ambient air quality standards is adequate for vegetation protection.

E. Pre-construction Monitoring

ADEM allows use of data from state-operated ambient air quality monitoring stations to satisfy pre-construction monitoring requirements (if applicable). Post-construction monitoring has occasionally been required.

F. Increment Tracking Procedures

The same baseline dates apply to the entire state. ADEM maintains a computerized inventory of increment-consuming sources. The emission source inventory generally shows allowable emission rates. ADEM commented that it would be very difficult to maintain a current inventory of actual emissions.

ADEM does not perform modeling of increment consumption on a scheduled basis. Rather, increment consumption is performed when needed for a new permit application.

As discussed above, ADEM provides emissions inventories to applicants for modeling purposes. The procedure for excluding sources from the inventory for a given project is established in writing. Projects with interstate impacts are coordinated with other states as needed.

G. Endangered Species Act (ESA)

ADEM has a SIP-approved NSR permitting program. ESA requirements are not applicable.

Nonattainment NSR

One nonattainment area (for ozone) has existed in a county under ADEM's jurisdiction for several years. ADEM has never had to process a major NSR permit in this nonattainment area. Hence, even though the nonattainment NSR section of the questionnaire is applicable, ADEM has no experience in practice that can be cited in answer to the questions. ADEM's answers were necessarily in terms of expectations and not experience.

A. Program Benefits

ADEM believes that the nonattainment NSR program provides an incentive to reduce emissions. The agency has never had to issue a major NSR permit, as stated above.

B. NSR Offsets

ADEM does not have an emissions offset bank and would have to approve proposed offsets on a case-by-case basis. Concerning the requirement of approving offsets only if they provide a "net air quality benefit," ADEM commented that the meaning of this provision is not necessarily clear. EPA agrees that clarification might be needed in some instances.

C. LAER Determinations

ADEM has not yet had to issue a major nonattainment NSR permit and therefore has not yet had to apply specific LAER determination procedures.

D. Alternatives Analysis

ADEM has not yet had to issue a major nonattainment NSR permit and therefore has not yet had to apply specific procedures for an alternatives analysis. ADEM's current rules do not include an alternatives analysis requirement as specified by section 173(a)(5) of the Clean Air Act. Alabama will correct this discrepancy by incorporating the NSR reform regulations into Alabama rules

E. Compliance of Other Major Sources in the State

ADEM has not yet had to issue a major nonattainment NSR permit and therefore has not had to invoke the requirement for applicant's to certify compliance for other major sources owned by the applicant in the same state.

Minor NSR Programs

A. NAAQS/Increment Protection

Modeling of minor sources typically is not required, but could be performed depending on case-by-case circumstances.

B. Control Requirements

Alabama's State Implementation Plan (SIP) provides for some general levels of control such as process weight rate limits for particulate matter and sulfur limitations for fuels (related to sulfur dioxide control).

C. Tracking Synthetic Minor NSR Permits

ADEM does not have a specific list of synthetic minor NSR permits. Such permits are listed in ADEM's total inventory of permits.

Public Participation

A. Public Notification

ADEM provides public notice for major NSR permits, Greenfield synthetic minor projects, projects involving case-by-case maximum achievable control technology determinations, and other projects at the Director's discretion. Notifications are made by newspaper (for projects requiring newspaper notification), through a mailing list, and through a website. The website contains the project analysis, draft permit, and public notice. Affected adjacent states are on ADEM's mailing list and receive notification of projects in writing.

The initial public comment period can be extended (by about a week) upon request and has been done so occasionally. ADEM can also extend the public comment period following a public hearing.

All public comments received are reviewed. If ADEM intends to issue a final permit that differs substantially from the original draft permit, a second draft permit may be issued with additional opportunity for public comment.

A public hearing will be held on a draft permit if ADEM receives a substantial number of valid comments on the draft permit. Notification of a public hearing is published in a newspaper and on a website at least 30 days in advance of the hearing.

B. Environmental Justice (EJ)

EJ considerations for Alabama projects are discussed in the title V program review section elsewhere in this report.

Program Staffing and Training Issues

As of the time of the review, ADEM had 52 staff (not including administrative) who spend at least part of their time in the NSR program. New employees are expected to complete specified EPA APTI courses during the first two years of employment and are mentored by experienced employees. In addition, training is provided to new employees in an 8-hour training class developed by ADEM. Employees continue their training by attending EPA courses and workshops and by attending seminars presented by the Air & Waste Management Association and other professional organizations.

General NSR Program Issues

ADEM evaluates use of emission factors (including AP-42 factors) based on professional experience.

During the preceding year, ADEM issued nine PSD construction permits. During the same period, ADEM issued 361 non-major permits. No nonattainment NSR permits were issued.

ADEM estimates that the average time to issue a PSD permit (from the time an application is deemed complete) is about three months.

ADEM has not required consideration of condensible particulate matter for NSR applicability assessments or for particulate matter compliance testing. ADEM would include such a requirement at such time as EPA adopts a rule stipulating consideration of condensibles and detailing an appropriate test method. In a recent permit (Chemical Lime), ADEM required a study for testing of condensibles and included a reopener clause that condensible particulate matter permit limits might be added depending on the results of the study.

Effective Construction Permits

Based on EPA Region 4's experience in reviewing ADEM's PSD permits, ADEM creates effective construction permits with appropriate permit conditions. EPA also commends ADEM for the engineering analysis reports that are included in the permit file for both major and minor NSR permits. Documentation of this type assists in creating an informative public record.

Suggested Improvements

Even though not a serious issue, ADEM's policy of not requiring "truly small" units to undergo BACT review is at variance with ADEM's PSD rules (and equivalent federal rules). EPA recommends that all units emitting a pollutant subject to PSD review be given some level of BACT consideration in accordance with PSD rules. A qualitative assessment would suffice for low-emitting units.

- Not requiring TRULY small units to undergo BACT review is a qualitative assessment, however ADEM has committed to document that the quantity of emissions make it technically/financially infeasible to control.

For proposed large emission projects with the potential for substantive Class I impacts beyond 100 km, EPA recommends that ADEM notify the affected FLM and require applicants to consult with the FLM.

EPA recommends that ADEM add a rule provision requiring an alternatives analysis as specified by section 173(a)(5) of the Clean Air Act. This should be done after EPA issues NSR implementation rules for 8-hour ozone nonattainment areas.

Conclusion

At the conclusion of the onsite portion of the Title V and NSR program reviews, Region 4 personnel met with key ADEM officials to conduct an exit interview. During this exit interview Region 4 shared the findings of the review and laid out a timeframe for when the final report would be completed. Personnel in attendance from EPA Region 4 were Randy Terry, Katy Forney, Kay Prince and Gregg Worley. ADEM officials in attendance included Tim Owen, Larry Brown and Ron Gore.

Overall, ADEM has demonstrated to EPA that it is operating both the title V and NSR programs at a high level of proficiency and looks forward to working with the ADEM in the future.

